AN 118:59288 CA Full-text

OREF 118:10623a,10626a

TI Preparation of colorless and orderless diglycerin

IN Oka, Kenji

PA Daicel Chemical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 04217637	А	19920807	JP 1990-417743	19901217 <
JP 2800070	В2	19980921		
PRAI JP 1990-417743		19901217		

AB — A colored distillation residue containing diglycerin (I) obtained as a byproduct in manufacturing I is purified by continuously distilling it to take out crude I as a tower-top liquid, and treating the crude I with activated charcoal followed by distillation to remove I from the top of the tower. The process removes a trace of impurities such as acrolein which gas chromatog. fails to detect, and gives cosmetic grade I which passes sensory tests for color and order. Thus, a black distillation bottoms containing glycerin 5, I 55, and triglycerin or higher polyglycerins $40 \, ^\circ$ is evaporated by a thin-film flush evaporator at 5 Torr, $260 \, ^\circ$, and feeding rate 200 g/h to give $40 \, ^\circ$ I of APHA value 200, which was treated with a column (diameter 5 cm, 16 cm height) of 120 g activated charcoal Diahope 008 (Mitsubishi Chemical Industries Ltd.) at feeding rate 50 g/h and $100 \, ^\circ$ to give $98 \, ^\circ$ I of APHA of $60 \, ^\circ$ 120. This was subjected to thin-film evaporation at 5 Torr, $160 \, ^\circ$, and feeding rate 200 g/h to give $90 \, ^\circ$ I of $99.5 \, ^\circ$ purity, and APHA of $<10 \, ^\circ$ 0 with no odor by sensory test.

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

```
1992-312255 [199238] WPIDS Full-text
DNC C1992-138685 [199321]
   Production of colourless and odourless di:glycerol of cosmetic grade -
    comprises distillation of residue liquid from glycerol production to obtain crude
    di:glycerol, treating with active carbon@ and distilling
    D21; E17
ΙN
    OKA K
PΑ
    (DAIL-C) DAICEL CHEM IND LTD
CYC 1
    JP 04217637
                  A 19920807 (199238)* JA 4[0]
PΤ
                                                                     <--
                 B2 19980921 (199843) JA 3
    JP 2800070
ADT JP 04217637 A JP 1990-417743 19901217; JP 2800070 B2 JP
    1990-417743 19901217
FDT JP 2800070 B2 Previous Publ JP 04217637 A
PRAI JP 1990-417743
                        19901217
IPCR B01D0015-00 [I,A]; B01D0015-00 [I,C]; C07B0063-00 [I,A]; C07B0063-00
    [I,C]; C07C0031-00 [I,C]; C07C0031-22 [I,A]; C07C0041-00 [I,C];
    C07C0041-36 [I,A]; C07C0041-42 [I,A]; C07C0043-00 [I,C]; C07C0043-13 [I,A]
FCL B01D0015-00 K; C07B0063-00 A; C07C0031-22; C07C0041-36; C07C0041-42;
    C07C0043-13 A; C07C0043-13 D
FTRM 4D017; 4H006; 4H006/AA02; 4D017/AA06; 4H006/AD11; 4H006/AD17; 4D017/BA03;
    4D017/BA04; 4D017/BA07; 4D017/CA03; 4D017/EA01; 4D017/EB02; 4D017/EB07;
    4H006/FE11; 4H006/FG30; 4H006/GN05; 4H006/GP01; 4H006/GP10
     JP 04217637 A UPAB: 20050505
AB
     Production oc colourless and odourless diglycerol comprises treating coloured
     distillation residue liquid containing diglycerol sec. formed in glycerol production
     according to process consisting of following three steps (a), (b) and (c). (a) to
     distil continuously and take out crude diglycerol liquid as column top liquid
     (b) to treat above crude diglycerol liquid with active C. (c) to distil above C
     treated liquid and take out from column top.
     ADVANTAGE - Diglycerol of high grade used as cosmetics material can be produced.
     - In an example, residual liquid (1) left after recovering glycerol was
     flash-evaporated to get purified diglycerol (2) of PHA 200, which was treated with
     active C and subjected to thin film evap
FS
    CPI
MC
    CPI: D08-B; E10-E04C
```

PRODUCTION OF COLORLESS ODORLESS DIGLYCEROL

Publication number: JP4217637 (A) Also published as: Publication date: 1992-08-07 __] JP2800070 (B2)

Inventor(s): OKA KENJI + Applicant(s): DAICEL CHEM + Classification:

- international:

B01D15/00; C07B63/00; C07C31/22; C07C41/36; C07C41/42; C07C43/13; B01D15/00; C07B63/00; C07C31/00; C07C41/00; C07C43/00; (IPC1-7): B01D15/00; C07B63/00; C07C31/22; C07C41/42; C07C43/13

- European:

Application number: JP19900417743 19901217 Priority number(s): JP19900417743 19901217

Abstract of JP 4217637 (A)

PURPOSE:To produce diglycerol usable as a cosmetic grade of high grade to pass functional tests from purified diglycerol not to pass the cosmetic grade, having such an analyzed value of acroleins by gas chromatography as an amount not to be analyzed. CONSTITUTION:A method of producing colorless odorless diglycerol wherein a colored distillation residue containing diglycerol prepared as a by-product in manufacturing glycerol is (a) continuously distilled and crude diglycerol liquid is taken out from a column top liquid, (b) the crude diglycerol liquid is treated with active carbon, then (c) distilled and taken out from the column top. Diglycerol usable as a cosmetic grade can be produced.

Data supplied from the ${\it espacenet}$ database — Worldwide

PATENT ABSTRACTS OF JAPAN

(11)Publication number:

04-217637

(43)Date of publication of application: 07.08.1992

(51)Int.CI.

CO7C 43/13 B01D 15/00 CO7B 63/00 CO7C 41/42 // CO7C 31/22

(21)Application number : 02-417743

(71)Applicant : DAICEL CHEM IND LTD

(22)Date of filing:

17.12.1990

(72)Inventor: OKA KENJI

(54) PRODUCTION OF COLORLESS ODORLESS DIGLYCEROL

(57)Abstract:

PURPOSE: To produce diglycerol usable as a cosmetic grade of high grade to pass functional tests from purified diglycerol not to pass the cosmetic grade, having such an analyzed value of acroleins by gas chromatography as an amount not to be analyzed.

CONSTITUTION: A method of producing colorless odorless diglycerol wherein a colored distillation residue containing diglycerol prepared as a by-product in manufacturing glycerol is (a) continuously distilled and crude diglycerol liquid is taken out from a column top liquid, (b) the crude diglycerol liquid is treated with active carbon, then (c) distilled and taken out from the column top. Diglycerol usable as a cosmetic grade can be produced.